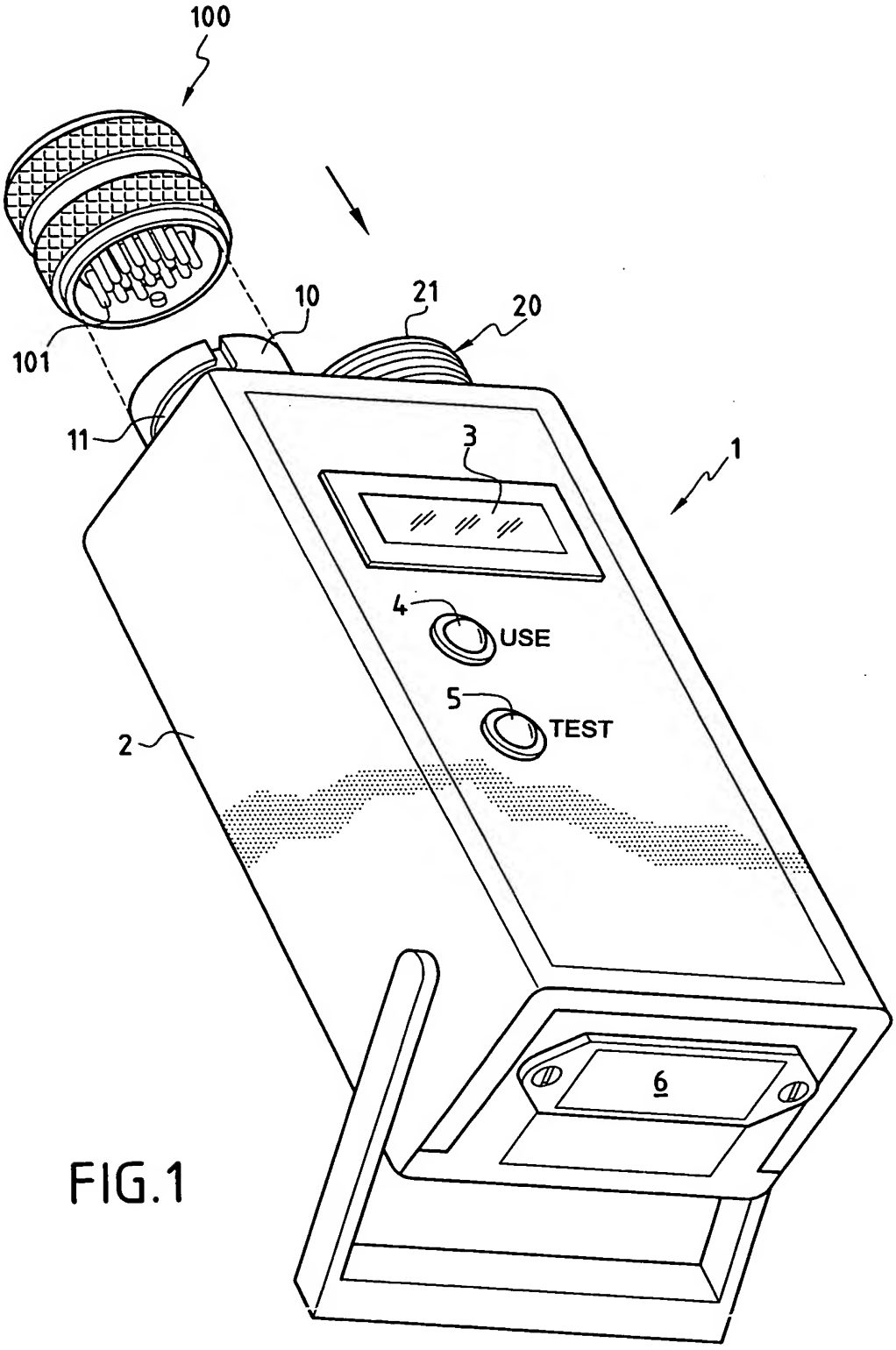

FIG.1

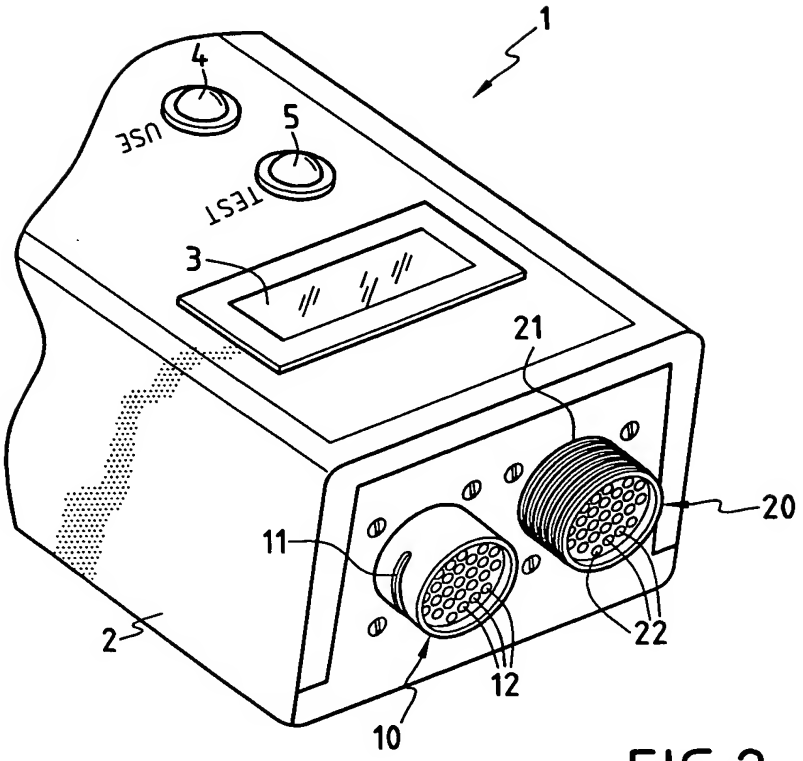
1
4
USE
5
TEST
3
21
20
11
22
2
12
10

FIG.2

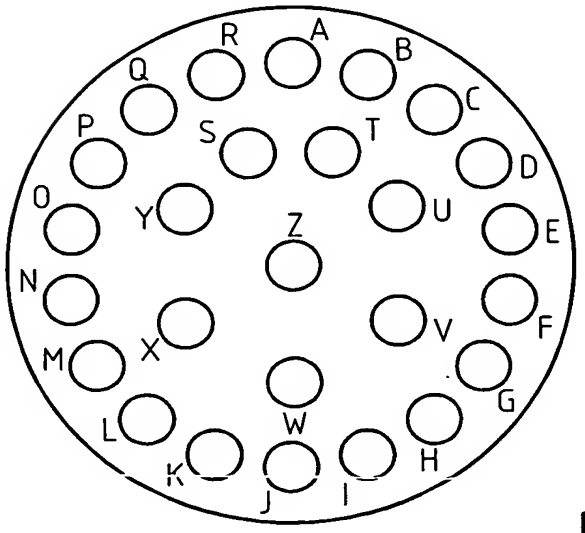
R
A
B
Q
C
P
S
T
D
O
Y
U
Z
E
N
V
F
X
M
G
W
L
H
K
J
I

FIG.3

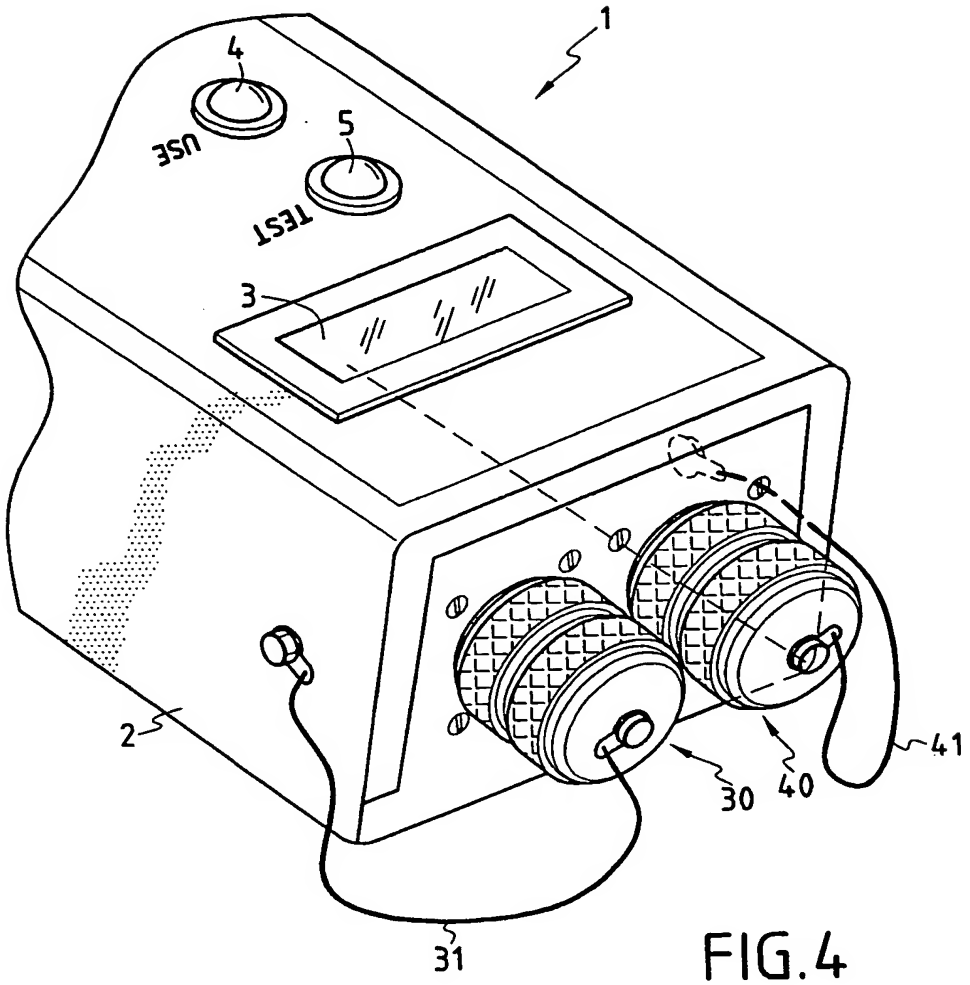

FIG.4

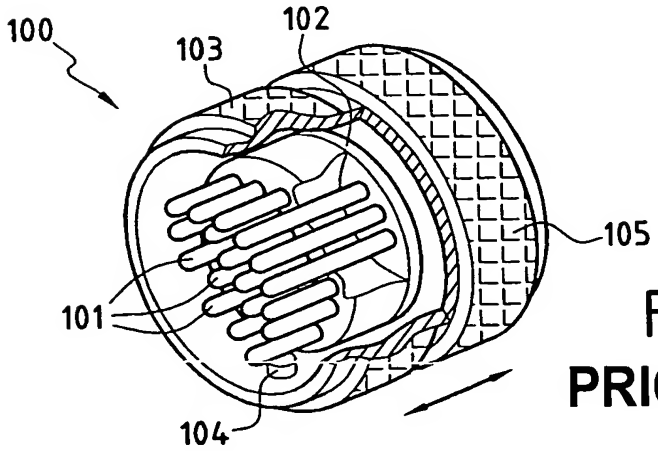

FIG.8
PRIOR ART

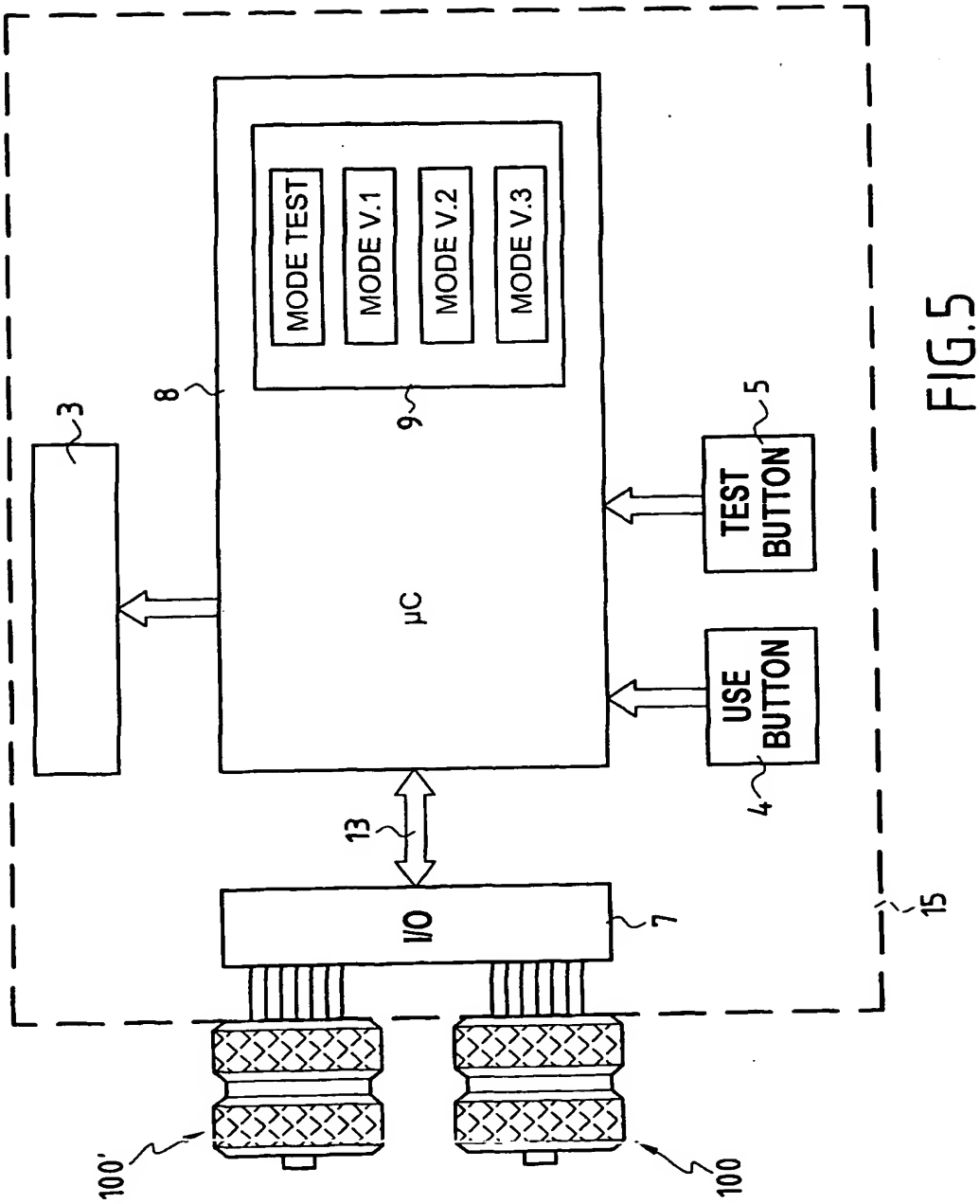
MODE TEST
MODE V.1
MODE V.2
MODE V.3
8
9
3
5
TEST BUTTON
µC
USE BUTTON
4
13
I/O
7
15
100'
100

FIG.5

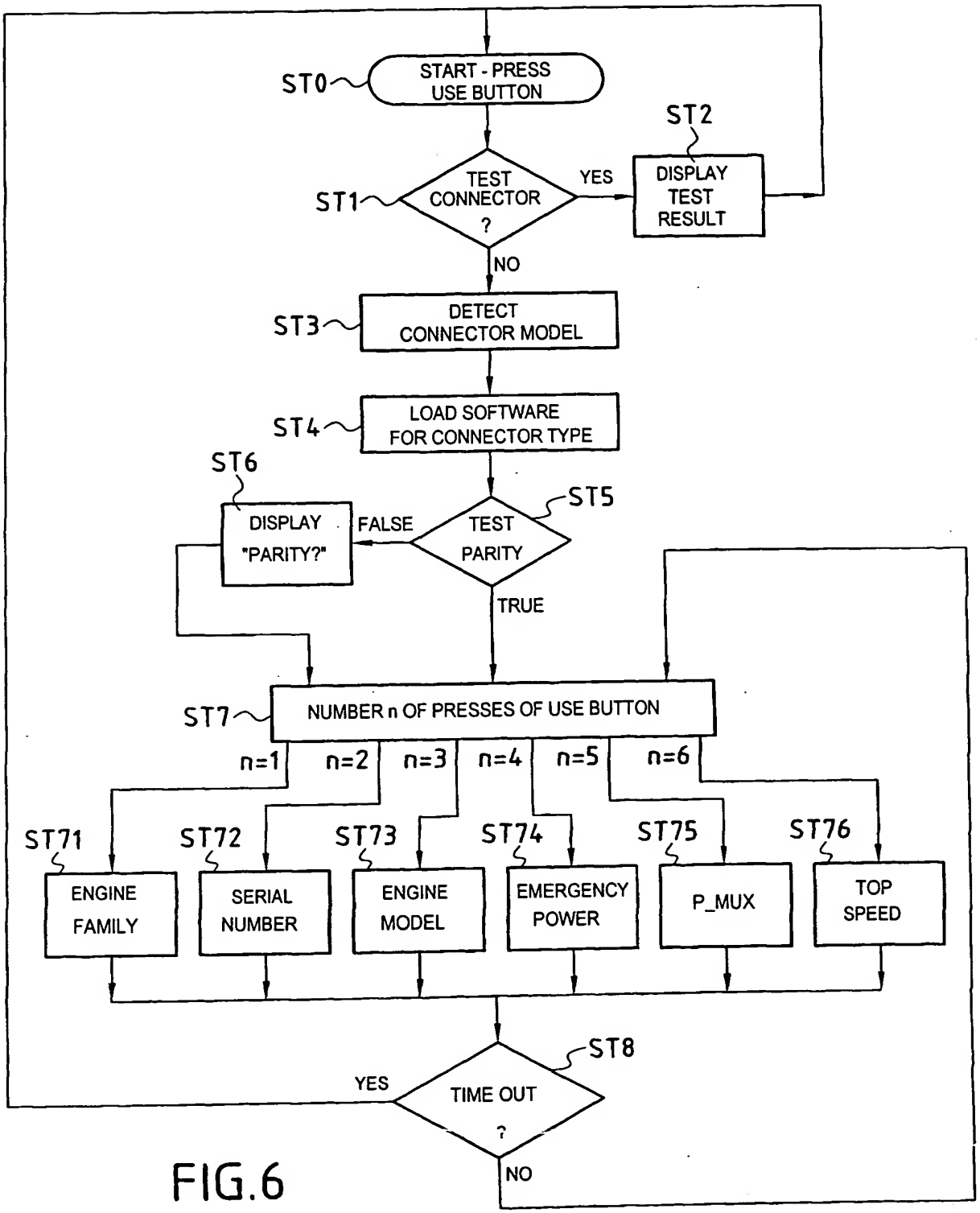
ST0
START - PRESS USE BUTTON
ST1
TEST CONNECTOR ?
YES
ST2
DISPLAY TEST RESULT
NO
ST3
DETECT CONNECTOR MODEL
ST4
LOAD SOFTWARE FOR CONNECTOR TYPE
ST6
DISPLAY "PARITY?"
FALSE
ST5
TEST PARITY
TRUE
ST7
NUMBER n OF PRESSES OF USE BUTTON
n=1
n=2
n=3
n=4
n=5
n=6
ST71
ENGINE FAMILY
ST72
SERIAL NUMBER
ST73
ENGINE MODEL
ST74
EMERGENCY POWER
ST75
P_MUX
ST76
TOP SPEED
ST8
TIME OUT ?
YES
NO

FIG.6

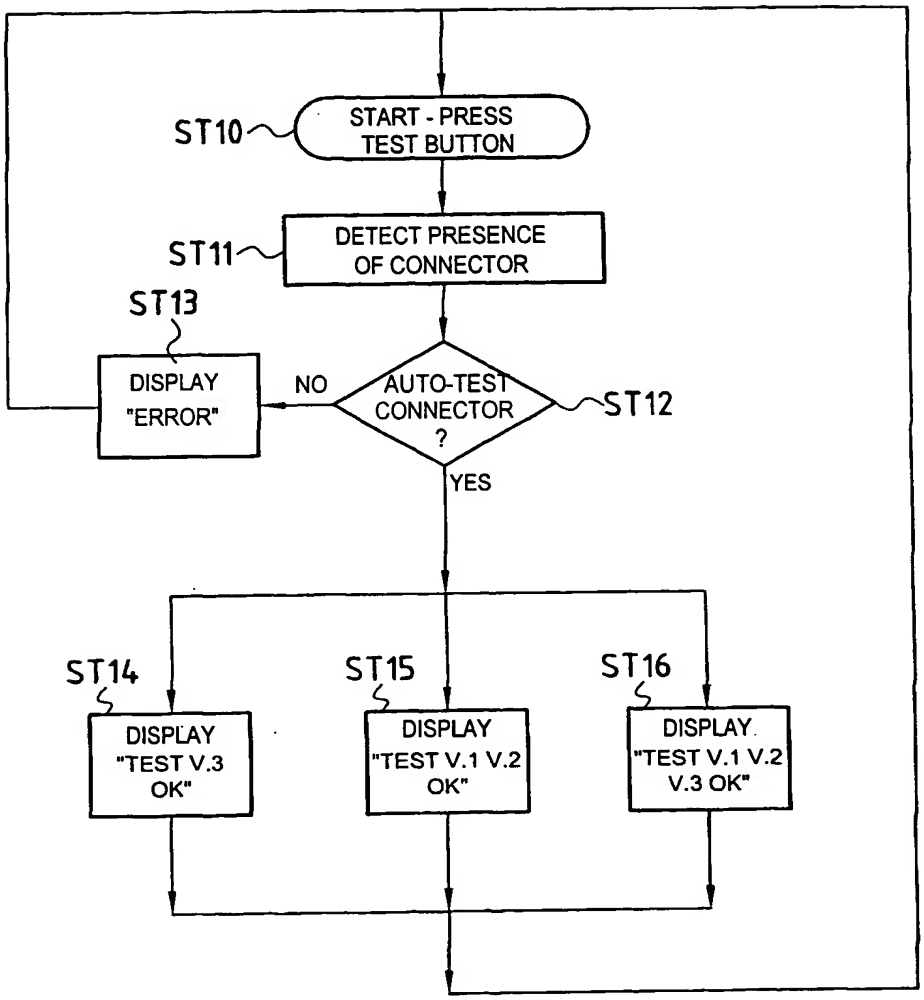
ST10
START - PRESS TEST BUTTON
ST11
DETECT PRESENCE OF CONNECTOR
ST13
DISPLAY "ERROR"
NO
AUTO-TEST CONNECTOR ?
ST12
YES
ST14
DISPLAY "TEST V.3 OK"
ST15
DISPLAY "TEST V.1 V.2 OK"
ST16
DISPLAY "TEST V.1 V.2 V.3 OK"

FIG.7